

# **Broad Agency Announcement**

# <u>Manufacturing Experimentation and Outreach</u> (MENTOR)

Tactical Technology Office (TTO)

DARPA-BAA-11-19

October 18, 2010

# **Table of Contents:**

Part I: Overview Information
Part II: Full Text of Announcement
Sec. I: FUNDING OPPORTUNITY DESCRIPTION
Sec. II: AWARD INFORMATION
Sec. III: ELIGIBILITY INFORMATION 8
A. Eligible Applicants
B. Cost Sharing/Matching
C. Other Eligibility Criteria
Sec. IV. APPLICATION AND SUBMISSION INFORMATION10
A. Address to Request Application Package
B. Content and Form of Application
Submission
Sec. V. APPLICATION REVIEW INFORMATION
A. Evaluation Criteria
B. Review and Selection Process
Sec. VI. AWARD ADMINISTRATION INFORMATION22
A. Award Notices
B. Administrative and National Policy Requirements
C. Reporting
D. Electronic Systems
Sec. VII. AGENCY CONTACTS
Sec. VIII. OTHER INFORMATION
A. Intellectual Property
B. Non-Procurement Contract Proposers – Noncommercial and
Commercial Items (Technical Data and Computer Software)
C. All Proposers – Patents

# **Part I: Overview Information**

- **Federal Agency Name** Defense Advanced Research Projects Agency (DARPA), Tactical Technology Office (TTO)
- **Funding Opportunity Title** Manufacturing Experimentation and Outreach (MENTOR)
- **Announcement Type** Initial announcement
- Funding Opportunity Number Broad Agency Announcement (BAA) 11-19
- Catalog of Federal Domestic Assistance Numbers (CFDA) Not applicable
- Dates
  - o Posting Date: October 18, 2010
  - o Question Due Date: November 3, 2010
  - o Proposal Due Date: December 17, 2010
- Total amount of money to be awarded: \$10.0 million
- Anticipated individual awards Multiple awards are anticipated
- **Types of instruments that may be awarded** Procurement contract or other transaction
- Agency contact

The BAA Coordinator for this effort can be reached at electronic mail: DARPA-BAA-11-19@darpa.mil, fax: +1-703-248-1861, or by U.S. Postal Service at:

DARPA/TTO Attn: BAA 11-19 3701 North Fairfax Drive Arlington, VA 22203-1714

# Part II: Full Text of Announcement

# I. FUNDING OPPORTUNITY DESCRIPTION

#### Vision

The Defense Advanced Research Projects Agency (DARPA) has embarked on a series of programs aimed at revolutionizing the way defense systems and vehicles are made. Titled Adaptive Vehicle Make, the portfolio has three principal objectives: to dramatically compress development times for complex defense systems such as military air and ground vehicles, to shift the product value chain for such systems toward high-value-added design activities, and to democratize the innovation process. The Manufacturing Experimentation and Outreach (MENTOR) effort is part of the Adaptive Vehicle Make program portfolio and is aimed at engaging high school students in a series of collaborative distributed manufacturing and design experiments. The overarching objective of MENTOR is to develop and motivate a next generation cadre of system designers and manufacturing innovators, and to ensure that high school-age youths are exposed to the principles of modern prize-based design and foundry-style digital manufacturing.

The end vision for MENTOR is the development of user-friendly, open-source tools to enable the utilization of conventional social network media (e.g., Facebook apps) for the purpose of collaborative distributed design and manufacturing across hundreds of sites and thousands of users. This capability will be accompanied by the deployment of an inexpensive, heterogeneous set of digitally-programmable manufacturing equipment (e.g., 3D printers for various materials) to 1,000 high schools globally. Prize-based design and manufacturing challenges would then enable clusters of schools to team and compete against one another in the development of cyber-electro-mechanical systems of moderate complexity such as go carts, mobile robots, small unmanned aircraft, etc.

DARPA encourages the participation of small businesses, non-profits, academia, non-traditional and international performers in the MENTOR solicitation. While MENTOR is aimed principally at the development of the U.S. domestic manufacturing cadre, substantial participation by foreign high schools is essential to leveraging best-of-kind talent and the development of international collaboration skills in an increasingly globalized industrial landscape.

#### **Program structure & objectives**

The program will be structured with a base period of performance of 24 months, followed by two sequential 12-month option periods. Offerors should submit proposals for the entire base period and two priced options.

Offerors should articulate in their proposal an approach to accomplishing all of the following program objectives with substantial specificity and elaboration.

Identification of Target High Schools: Offerors should describe their approach to selecting schools for participation in this effort. The goal should be to engage 10 schools by the conclusion of the base period of performance (first two years), 100 schools in year three, and 1,000 schools in year four. An outreach approach by which selected schools will be engaged should be discussed in detail. Additionally, offerors should develop quantitative metrics by which the impact of their effort on the target student population can be assessed. These metrics should capture the breadth, depth, and quality of engagement, as well as measurable impact on other indicators of student success. Offerors should supply preliminary estimates of these metrics and their evolution for worst, median, and best case success scenarios over the course of their proposed effort. Offerors should also develop and describe a strategy for ensuring that the student experience under the MENTOR effort is turned it into enduring programs within the target schools and beyond.

Distributed Design Infrastructure: Offerors should describe their approach to the collaborative distributed design infrastructure. Such infrastructure should leverage, to the maximum extent possible, existing social networks vice the development of new ones from scratch (e.g., through a Facebook app). Offerors should consider the potential range of commercial, free, and custom software products to facilitate this capability. The principal desired capability is for students within a single high school and across multiple high schools to independently contribute to a shared outcome, i.e., a joint design of a cyber-electro-mechanical system of moderate complexity. Offerors should describe their overall concept and architecture for this distributed design capability. The complexity and sophistication of the approach should be appropriate for the target audience. Offerors should describe in detail their development, deployment, and sustainment plan over the course of the base and option periods.

Distributed manufacturing infrastructure: Offerors should describe their approach to a distributed, digitally-programmable manufacturing capability encompassing a significant number of high school sites each with an independent and potentially distinct item(s) of manufacturing equipment. In selecting appropriate manufacturing machinery, offerors should be mindful of the flexibility of the equipment to produce a wide assortment of components, its ease and safety of operation, and its programmable interfaces. Offerors should consider the potential range of commercial, free, and custom software products to facilitate this capability. Note that the aggregate capability to produce a range of components needed for cyber-electro-mechanical systems of moderate complexity is desired. Offerors should describe their overall concept and architecture for this distributed manufacturing capability, and its interface and relationship with the distributed design infrastructure. The complexity and sophistication of the approach should be appropriate for the target audience. Offerors should describe in detail their development, deployment, and sustainment plan over the course of the base and option periods.

Series of prize challenges: Offerors should develop and articulate a plan for a series of prize-based challenges to incentivize the utilization of the distributed design and

manufacturing capability by high school students. The challenges should be structured so as to provide an appropriate incentive scheme for engaging student interest and promoting in-depth involvement, e.g., one that permits collaboration between clusters of students or schools, and competition among clusters. Offerors should describe the specific prize challenge ideas, as well as how they will be implemented and orchestrated. DARPA is responsible for the final selection of the prize winner(s) and disbursement of the prize award(s). Offerors may recommend prize award amounts in their proposals, but they should not be included in the cost proposal.

#### **Deliverables**

Offerors should propose an appropriate schedule of reviewable interim milestones, to occur at least bi-monthly. These milestones should have concrete interim deliverables (e.g., code builds, demo runs, capability demos, documentation delivery, etc.) and quantitative metrics of progress associated with them. Offerors are also referred to Section VI.C of this BAA for additional reporting requirements.

All milestone reviews will be conducted in the form of principal investigator (PI) meetings—occurring bi-monthly—at which all MENTOR performers, along with performers on other related efforts in the Adaptive Vehicle Make program portfolio, will present their results. The PI meetings will be held at Government-furnished facilities in major U.S. or international metropolitan areas with easy access by air. The Government reserves the option to make the PI meetings open events. To facilitate the exchange of information between performers, selected offerors may be required to implement an associate contractor agreement (ACA) as a condition for contract award. Performers should plan for short bi-weekly status updates to be conducted via videoteleconference (VTC) or traditional teleconference if appropriate facilities are unavailable.

DARPA desires to receive complete, fully functional algorithms, source code, binaries, documentation, interchange standards, equipment, and test use cases implementing the capability described in this BAA. The final version of these deliverables must be supplied to the Government no later than the end of the base period of performance and any time modifications are made during the option periods. The delivery of interim versions as milestone deliverables is strongly encouraged.

DARPA desires Unlimited Rights to all deliverables (except commercially or freely available software, e.g., compilers, web servers, social network APIs, etc.) to enable their industry-wide promulgation in the course of, and subsequent to, this program. DARPA does not require intellectual property rights to student designs developed in the course of the prize challenge competitions, except as needed to judge winners. Intellectual property will be an explicit factor in proposal evaluation and proposers should structure their development accordingly, especially where heritage intellectual property is included.

Offerors should propose as part of their work plan affirmative steps for the open source promulgation of all source code, executables, documentation, and test use cases for the MENTOR collaboration infrastructure and distributed manufacturing capability. The

specific open source license will be specified by DARPA in the course of the period of performance.

No later than the end of each period of performance (base period and each option period), the performer shall deliver a final report in the form of: (1) a technical manuscript of publishable quality and suitable for publication in a journal or conference proceedings documenting their technical progress and results achieved in significant detail, and (2) a programmatic final report containing financial data and other information not suitable for publication but appropriate for program documentation and planning.

DARPA anticipates funding this effort with RDT&E Budget Activity 2 ("6.2"), Applied Research funds, enabling academic institutions performing work on campus to participate without pre-publication review restrictions.

# II. AWARD INFORMATION

Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds. DARPA tentatively anticipates making a total of up to \$2.0 million available for the base effort spanning 24 months. Up to a total of \$4.0 million will be available for each of the subsequent two 12 month options. A grand total of approximately \$10.0 million is available for award under this BAA.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation, and to make awards without discussions with proposers. The Government also reserves the right to conduct discussions if it is later determined to be necessary. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, DARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that DARPA desires to award only portions of a proposal, negotiations may be opened with that proposer. The Government reserves the right to fund proposals in phases with options for continued work at the end of one or more of the phases.

Awards under this BAA will be made to proposers on the basis of the evaluation criteria listed below (see section labeled "Application Review Information", Sec. V.), and program balance to provide overall value to the Government. Proposals identified for negotiation may result in a procurement contract or other transaction depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. The Government reserves the right to request any additional, necessary documentation once it makes the award instrument determination. Such additional information may include but is not limited to Representations and Certifications. The Government reserves the right to remove proposers from award consideration should the parties fail to reach agreement on award terms, conditions and cost/price within a reasonable time or the proposer fails to timely provide requested additional information.

As of the date of publication of this BAA, DARPA expects that program goals for this BAA may be met by proposers intending to perform 'fundamental research,' i.e., basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization the results of which ordinarily are restricted for proprietary or national security reasons. Notwithstanding this statement of expectation, DARPA is not prohibited from considering and selecting research proposals that, while perhaps not qualifying as 'fundamental research' under the foregoing definition, still meet the BAA criteria for submissions. In all cases, the contracting officer shall have sole discretion to select award instrument type and to negotiate all instrument provisions with selectees.

# III. ELIGIBILITY INFORMATION

### A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. DARPA encourages the participation of small businesses, academia, non-traditional, and international performers in this solicitation.

Historically Black Colleges and Universities (HBCUs), Small Businesses, Small Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting proposals; however, no portion of this announcement will be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities.

Federally Funded Research and Development Centers (FFRDCs) and Government entities (Government/National laboratories, military educational institutions, etc.) are subject to applicable direct competition limitations and cannot propose to this BAA in any capacity unless they address the following conditions. FFRDCs must clearly demonstrate that the proposed work is not otherwise available from the private sector AND must also provide a letter on letterhead from their sponsoring organization citing the specific authority establishing their eligibility to propose to government solicitations and compete with industry, and compliance with the associated FFRDC sponsor agreement and terms and conditions. This information is required for FFRDCs proposing to be prime or subcontractors. Government entities must clearly demonstrate that the work is not otherwise available from the private sector and provide written documentation citing the specific statutory authority (as well as, where relevant, contractual authority) establishing their ability to propose to Government solicitations. At the present time, DARPA does not consider 15 U.S.C. 3710a to be sufficient legal authority to show eligibility. While 10 U.S.C. 2539b may be the appropriate statutory starting point for some entities, specific supporting regulatory guidance, together with evidence of agency approval, will still be required to fully establish eligibility. DARPA

will consider eligibility submissions on a case-by-case basis; however, the burden to prove eligibility for all team members rests solely with the Proposer.

# 1. Procurement Integrity, Standards of Conduct, Ethical Considerations, and Organizational Conflicts of Interest

Current federal employees are prohibited from participating in particular matters involving conflicting financial, employment, and representational interests (18 USC 203, 205, and 208.). The DARPA Program Manager for this BAA is Paul Eremenko. Once the proposals have been received, and prior to the start of proposal evaluations, the Government will assess potential conflicts of interest and will promptly notify the proposer if any appear to exist. (Please note the Government assessment does NOT affect, offset, or mitigate the proposer's own duty to give full notice and planned mitigation for all potential organizational conflicts, as discussed below.)

All Proposers and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any DARPA technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the Proposer supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the Proposer has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval or a waiver from the DARPA Director, a Contractor cannot simultaneously be a SETA and Performer. Proposals that fail to fully disclose potential conflicts of interests and/or do not have plans to mitigate this conflict will be rejected without technical evaluation and withdrawn from further consideration for award.

If a prospective Proposer believes that any conflict of interest exists or may exist (whether organizational or otherwise), the Proposer should promptly raise the issue with DARPA by sending Proposer's contact information and a summary of the potential conflict by email to the mailbox address for this BAA at DARPA-BAA-11-19@darpa.mil, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be effectively mitigated, the proposal may be rejected without technical evaluation and withdrawn from further consideration for award under this BAA.

### B. Cost Sharing/Matching

Cost sharing is not required for this particular program; however, cost sharing will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument (e.g., for any Other Transactions under the authority of 10 U.S.C. § 2371). Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.

# C. Other Eligibility Criteria

#### 1. Collaborative Efforts

DARPA encourages the participation of small businesses, non-profits, academia, non-traditional and international performers in the MENTOR solicitation. Teaming is not required. International interest and participation are welcome.

# IV. APPLICATION AND SUBMISSION INFORMATION

#### A. Address to Request Application Package

This solicitation contains all information required to submit a proposal. No additional forms, kits, or other materials are needed. This notice constitutes the total BAA. No additional information is available, nor will a formal Request for Proposal (RFP) or additional solicitation regarding this announcement be issued. Requests for same will be disregarded.

# B. Content and Form of Application Submission

### 1. Security and Proprietary Issues

NOTE: If proposals are classified, the proposals must indicate the classification level of not only the proposal itself, but also the anticipated award document classification level.

# The Government anticipates proposals submitted under this BAA will be unclassified.

However, if a proposal is submitted as "Classified National Security Information" as defined by Executive Order 13526 as amended, then the information must be marked and protected as though classified at the appropriate classification level and then submitted to DARPA for a final classification determination.

Proposers choosing to submit a classified proposal from other classified sources must first receive permission from the respective Original Classification Authority in order to use their information in replying to this BAA. Applicable classification guide(s) should also be submitted to ensure the proposal is protected at the appropriate classification level.

Classified submissions shall be appropriately and conspicuously marked with the proposed classification level and declassification date. Submissions requiring DARPA to make a final classification determination shall be marked as follows:

CLASSIFICATION DETERMINATION PENDING. Protect as though classified (insert the recommended classification level: (e.g., Top Secret, Secret or Confidential)

Classified submissions shall be in accordance with the following guidance:

Confidential and Secret Collateral Information: Use classification and marking guidance provided by previously issued security classification guides, the Information Security Regulation (DoD 5200.1-R), and the National Industrial Security Program Operating Manual (DoD 5220.22-M) when marking and transmitting information previously classified by another Original Classification Authority. Classified information at the Confidential and Secret level may be mailed via appropriate U.S. Postal Service methods (e.g., (USPS) Registered Mail or USPS Express Mail). All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. The inner envelope shall be addressed to:

Defense Advanced Research Projects Agency ATTN: DARPA/TTO Reference: (BAA-11-19) 3701 North Fairfax Drive Arlington, VA 22203-1714

The outer envelope shall be sealed with no identification as to the classification of its contents and addressed to:

Defense Advanced Research Projects Agency Security & Intelligence Directorate, Attn: CDR 3701 North Fairfax Drive Arlington, VA 22203-1714

<u>All Top Secret materials</u>: Top Secret information should be hand carried by an appropriately cleared and authorized courier to the DARPA CDR. Prior to traveling, the courier shall contact the DARPA CDR at 571-218-4842 to coordinate arrival and delivery.

**Special Access Program (SAP) Information**: SAP information must be transmitted via approved methods. Prior to transmitting SAP information, contact the DARPA SAPCO at 703-526-4052 for instructions.

<u>Sensitive Compartmented Information (SCI)</u>: SCI must be transmitted via approved methods. Prior to transmitting SCI, contact the DARPA Special Security Office (SSO) at 703-248-7213 for instructions.

<u>Proprietary Data</u>: All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing

proprietary data. It is the Proposer's responsibility to clearly define to the Government what is considered proprietary data.

Security classification guidance via a DD Form 254, "DoD Contract Security Classification Specification," will not be provided at this time since DARPA is soliciting ideas only. After reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information a DD Form 254 will be issued and attached as part of the award.

Proposers must have existing and in-place prior to execution of an award, approved capabilities (personnel and facilities) to perform research and development at the classification level they propose. It is the policy of DARPA to treat all proposals as competitive information, and to disclose their contents only for the purpose of evaluation. Proposals will not be returned. The original of each proposal received will be retained at DARPA and all other non-required copies destroyed. A certification of destruction may be requested, provided the formal request is received at this office within 5 days after unsuccessful notification.

# 2. Proposal Information

Proposers are required to submit full proposals by the time and date specified in the BAA in order to be considered during the initial round of selections. DARPA may evaluate proposals received after this date until April 18, 2011.

DARPA will accept unclassified proposals submitted under this BAA by mail or handdelivery. Proposals must be submitted to:

DARPA/TTO Attn: DARPA-BAA-11-19 3701 North Fairfax Drive Arlington, VA 22203-1714

Proposals must be submitted in hard copy, with one signed original and four (4) copies plus two (2) CD-ROMs each containing an electronic copy of the complete proposal as a single PDF file. Each copy must be clearly labeled with DARPA-BAA-11-19, proposer organization, proposal title (short title recommended), and copy X of N.

Facsimile or electronic submissions will not be accepted.

For hand deliveries, the courier should deliver the package to the DARPA Visitor Control Center at the address specified above. The outer package, as well as the cover page of the proposal, must be marked "DARPA-BAA-11-19."

Responses to this BAA will not be returned.

Restrictive notices notwithstanding, proposals may be handled, for administrative purposes only, by a support contractor. This support contractor is prohibited from competition in DARPA technical research and is bound by appropriate nondisclosure requirements. Proposals and proposed abstracts may not be submitted by fax or e-mail; any so sent will be disregarded.

The proposal shall be delivered in a single volume including both technical and cost information. Proposals not meeting the format described in this BAA may not be reviewed.

The proposal shall include the following sections, each starting on a new page (where a "page" is 8-1/2 by 11 inches with type not smaller than 12 point, charts may use 10 point font, margins not smaller than 1 inch, and line spacing not smaller than single-spaced). Fold-outs up to 11 by 17 inches may be used but will be counted as two pages. All submissions must be in English. Individual elements of the proposal shall not exceed the total of the maximum page lengths for each section as shown in braces { } below.

Ensure that each section provides detailed discussion of the proposed work necessary to enable an in-depth review of the specific technical and managerial issues. Specific attention must be given to addressing both risk and payoff of the proposed work that make it desirable to DARPA.

# **Proposal Section 1. Administrative**

### 1.1 Cover Sheet {no page limit}

- BAA number;
- Technical area(s);
- Lead organization submitting proposal;
- Type of business, selected among the following categories:
  - O WOMEN-OWNED LARGE BUSINESS.
  - o OTHER LARGE BUSINESS,
  - o SMALL DISADVANTAGED BUSINESS [identify ethnic group from among the following: Asian-Indian American, Asian-Pacific American, Black American, Hispanic American, Native American, or Other],
  - WOMEN-OWNED SMALL BUSINESS,
  - o OTHER SMALL BUSINESS,
  - o HBCU,
  - o MI.
  - o OTHER EDUCATIONAL,
  - o OTHER NONPROFIT, OR
  - o FOREIGN CONCERN/ENTITY;
- All other team members (if applicable and including second- and lower-tier subcontractors) and type of business for each;
- Proposal title;
- Technical point of contact to include: salutation, last name, first name, street

- address, city, state, zip code, telephone, fax, and electronic mail;
- Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax, and electronic mail;
- Award instrument requested: cost-plus-fixed-free (CPFF), cost-contract—no fee, cost sharing contract no fee, or other type of procurement contract (specify), or other transaction;
- Place(s) and period(s) of performance;
- Summary of the costs of the proposed research, including total base cost, estimates of base cost in each year of the effort, estimates of itemized options in each year of the effort, and cost sharing if relevant;
- Name, address, and telephone number of the offeror's cognizant Defense Contract Management Agency (DCMA) administration office (if known);
- Name, address, and telephone number of the offeror's cognizant Defense Contract Audit Agency (DCAA) audit office (if known);
- Date proposal was prepared;
- DUNS number:
- TIN number;
- Cage Code;
- Proposal validity period (minimum 180 days).

# **1.2 Table of Contents (no page limit)**

# 1.3 Organizational Conflict of Interest Affirmations and Disclosure {no page limit}

Per the instructions in Section III.A.1 above, if the offeror or any proposed sub IS providing SETA support, as described, to any DARPA technical office(s) through an active contract or subcontract (regardless of which DARPA technical office is being supported), they must provide documentation: 1) stating which office(s) the offeror, sub and/or individual supports, 2) identify the prime contract numbers AND 3) include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate the conflict.

If the offeror or any proposed sub IS NOT currently providing SETA support as described, then the offeror should simply state "NONE."

Proposals that fail to fully disclose potential conflicts of interests or do not have acceptable plans to mitigate identified conflicts will be rejected without technical evaluation and withdrawn from further consideration for award.

# 1.4 Human Use {no page limit}

For all proposed research that will involve human subjects in the first year or phase of the project, the institution must provide evidence of or a plan for review by an Institutional Review Board (IRB) upon final proposal submission to DARPA. For further information on this subject, see Section VI.B.2 below. If human use is not a factor in a proposal, then the offeror should state "NONE."

#### 1.5 Animal Use {no page limit}

For submissions containing animal use, proposals must briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. For further information on this subject, see Section VI.B.3 below. If animal use is not a factor in a proposal, then the offeror should state "None."

# 1.6 Statement of Unique Capability Provided by Government or Government-Funded Team Member {no page limit}

Per section III.A. – Eligible Applicants, proposals which include Government or Government-funded entities (i.e., FFRDC's, National laboratories, etc.) as prime, sub or team member, shall provide a statement which clearly demonstrates the work being provided by the Government or Government-funded entity team member is not otherwise available from the private sector. If none of the team members belongs to a Government or Government-funded entity, then the offeror should state "Not Applicable."

#### 1.7 Government or Government-funded Team Member Eligibility (no page limit)

Per section III.A. – Eligible Applicants, proposals which include Government or Government-funded entities (i.e., FFRDC's, National laboratories, etc.) as prime, sub or team member shall provide documentation citing the specific authority which establishes they are eligible to propose to Government solicitations: 1) statutory authority; 2) contractual authority; 3) supporting regulatory guidance; AND 4) evidence of agency approval. If no such entities are involved, then the offeror should state "None."

# **Proposal Section 2. Technical Details**

# 2.1 PowerPoint Summary Chart {1 page}:

Provide a one slide summary of the proposal that effectively and succinctly conveys in graphical form the main objective, key innovations, expected impact, proposer team, and other unique aspects of the proposal. The summary slide should focus on a visual depiction of the proposed concept. "Penta" and "quad" chart formats should be avoided.

# 2.2 Innovative Claims for the Proposed Research {4 pages}:

This section is the centerpiece of the proposal and should succinctly describe the unique proposed approach and contributions. This section may also *briefly* address the following topics:

- a. Problem Description. Provide a concise description of the problem areas addressed. Make this specific to your approach.
- b. Research Goals. Identify specific research goals. Goals should address the technical challenges of the effort.
- c. Expected Impact. Describe and justify the expected impact of your research.

#### 2.3 Technical Approach {15 pages}:

Provide a detailed description of the technical approach. This section will serve as the primary expression of the offeror's scientific and technical ideas. It should also include the offeror's understanding of the state of the art approaches and the limitations that relate to each topic addressed by the proposal. Describe and analyze state of the art results, approaches, and limitations within the context of the problem area addressed by

this research. Demonstrating problem understanding requires not just the enumeration of related efforts; rather, related work must be compared and contrasted to the proposed approach.

# 2.4 Intellectual Property (No page limit)

Per section VI.B.1 below, offerors responding to this BAA must submit a separate list of all technical data or computer software that will be furnished to the Government with other than unlimited rights. The Government will assume unlimited rights if offerors fail to identify any intellectual property restrictions in their proposals. Include in this section all proprietary claims to results, prototypes, deliverables or systems supporting and/or necessary for the use of the research, results, prototypes and/or deliverables. If no restrictions are intended, then the offeror should state "NONE".

#### 2.5 Management Plan {5 Pages}:

Describe formal teaming agreements that are required to execute this program, a brief synopsis of all key personnel, and a clearly defined organization chart for the program team (prime contractor and subcontractors, if any). Provide an argument that the team size and composition are both necessary and sufficient to meet the program objectives. Provide detailed task descriptions, costs, and interdependencies for each individual effort and/or subcontractor. To the extent that graduate students and postdocs are involved in individual efforts, describe their role and contribution. This section must cover the following information:

- a. Programmatic relationship of team members;
- b. Unique capabilities of team members;
- c. Task responsibilities of team members;
- d. Teaming strategy among the team members;
- e. Key personnel along with the amount of effort to be expended by each person during each year; and
- f. Government role in project, if any.

# 2.6 Personnel, Qualifications, and Commitments {5 pages}:

List key personnel, showing a concise summary of their qualifications. Provide a description of any previous accomplishments or similar efforts completed/ongoing in this or closely related research area, including identification of other Government sponsors, if any.

Indicate the level of effort in terms of hours to be expended by each person during each contract year and other (current and proposed) major sources of support for them and/or commitments of their efforts. DARPA expects all key personnel associated with a proposal to make substantial time commitment to the proposed activity and the proposal will be evaluated accordingly. It is DARPA's intention to put key personnel clauses into the contracts, so offerors should not bid personnel whom they do not intend to employ on the contract.

Include a table of key individual time commitments as follows:

Key Individual	Project	Pending/Current	2010	2011	2012
III III III III III III III III III II	1 10,1000	i change carrent			

Jane Doe	Program Name	Proposed	X hours	Y hours	Z hours
	Project 1	Current	n/a	n/a	n/a
	Project 2	Pending	100 hours	n/a	n/a
John Deer	Program Name	Proposed			

# 2.7 Schedule and Milestones {8 pages}:

This section should include:

- a. {2 pages} Cost, schedule and measurable milestones for the proposed research, including estimates of cost for each task in each year of the effort delineated by the prime and major subcontractors, total cost and company cost share, if applicable. (Note: Measurable milestones should capture key development points in tasks and should be clearly articulated and defined in time relative to start of effort.)
- b. {2 pages} Schedule Graphic. Provide a graphic representation of project schedule including detail down to the individual effort level. This should include but not be limited to a coherent development plan, which demonstrates a clear understanding of the proposed research; and a plan for periodic and increasingly robust tests over the project life that will show applicability to the overall program concept. Show all project milestones. Use "x months after contract award" designations for all dates.
- c. {2 pages} Detailed Task Descriptions. Provide detailed task descriptions for each discrete work effort and/or subcontractor in schedule graphic.
- d. {2 pages} Cost Summary. Provide a top level total cost summary for the entire program. Show each major task and subtask by month and delineate prime and major subcontractor efforts.

# 2.8 Statement of Work (SOW) {no page limit}:

In plain English, clearly define the technical tasks/subtasks to be performed, their durations, and dependencies among them. For each task/subtask, provide:

- A general description of the objective (for each defined task/activity);
- A detailed description of the approach to be taken to accomplish each defined task/activity);
- Identification of the primary organization responsible for task execution (prime, sub, team member, by name, etc.);
- The completion criteria for each task/activity—a product, event or milestone that defines its completion;
- Define all deliverables (reports, data, software, hardware, prototypes, etc.) to be provided to the Government in support of the proposed research tasks/activities. Include expected delivery date for each deliverable.

<u>Do not include any proprietary information in the SOW or include any markings placing limitations on distribution on the pages containing the SOW.</u>

**Proposal Section 3. Cost** 

# 3.1 Detailed Cost Breakdown {no page limit}

Provide: (1) total program cost broken down by major cost items (direct labor, including labor categories; subcontracts; materials; other direct costs, overhead charges, etc.) and further broken down by task and phase; (2) major program tasks by fiscal year; (3) an itemization of major subcontracts and equipment purchases; (4) an itemization of any information technology (IT) purchase<sup>1</sup>; (5) a summary of projected funding requirements by month; and (6) the source, nature, and amount of any industry cost-sharing; (7) identification of pricing assumptions of which may require incorporation into the resulting award instrument (e.g., use of Government Furnished Property/Facilities/Information, access to Government Subject Matter Experts, etc.) and 8) provide appropriate cost or price analyses of subcontractor proposals, IAW FAR 15.404-3, to establish the reasonableness of proposed subcontract prices.

The prime contractor is responsible for compiling and providing all subcontractor proposals for the Procuring Contracting Officer (PCO). Subcontractor proposals should include Interdivisional Work Transfer Agreements (ITWA) or similar arrangements. Where the effort consists of multiple portions which could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each. NOTE: for IT and equipment purchases, include a letter stating why the offeror cannot provide the requested resources from its own funding.

Provide supporting cost and pricing information in sufficient detail to substantiate the summary cost estimates above. Include a description of the method used to estimate costs and supporting documentation. Note: "cost or pricing data" as defined in FAR Subpart 15.4 shall be required if the offeror is seeking a procurement contract award of \$650,000 or greater unless the offeror requests an exception from the requirement to submit cost or pricing data. "Cost or pricing data" are not required if the offeror proposes an award instrument other than a procurement contract (e.g., other transaction). All proprietary subcontractor proposal documentation, prepared at the same level of detail as that required of the prime, shall be made immediately available to the Government, upon request, under separate cover (i.e., mail, electronic/email, etc.), either by the offeror or by the subcontractor organization.

<sup>&</sup>lt;sup>1</sup> IT is defined as "any equipment, or interconnected system(s) or subsystem(s) of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information by the agency. (a) For purposes of this definition, equipment is used by an agency if the equipment is used by the agency directly or is used by a contractor under a contract with the agency which – (1) Requires the use of such equipment; or (2) Requires the use, to a significant extent, or such equipment in the performance of a service or the furnishing of a product. (b) The term "information technology" includes computers, ancillary, software, firmware and similar procedures, services (including support services), and related resources. (c) The term "information technology" does not include – (1) Any equipment that is acquired by a contractor incidental to a contract; or (2) Any equipment that contains imbedded information technology that is used as an integral part of the product, but the principal function of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, is not information technology."

The Government may award either a Federal Acquisition Regulation (FAR) based contract or an Other Transaction Authority for Prototypes (OTA) agreement for prototype system development proposals. Offerors interested in receiving an OTA are asked to submit proposal responses that accommodate both options. The Government will evaluate all Offerors' FAR based proposals in accordance with the established evaluation criteria. After award selection based on the FAR based proposals, the Government will evaluate the selected awardees Other Transaction proposal with the intent of selecting the program approach offering the most benefit to the Government. The intent of this evaluation approach is to prevent contractors with greater financial flexibility from reducing the proposed cost to the Government by providing a large cost share or extra effort beyond that of a contractor with less financial capability. In this approach all proposals are evaluated based upon their technical merits and ability to realistically price their proposed technical scope. For information on 845 Other Transaction Authority for Prototypes (OTA) agreements, refer to <a href="http://www.darpa.mil/cmo/other\_trans.html">http://www.darpa.mil/cmo/other\_trans.html</a>.

All proposers requesting an 845 Other Transaction Authority for Prototypes (OTA) agreement must include a detailed list of milestones. Each such milestone must include the following: milestone description, completion criteria, due date, payment/funding schedule (to include, if cost share is proposed, contractor and Government share amounts). It is noted that, at a minimum, such milestones should relate directly to accomplishment of program technical metrics as defined in the BAA and/or the offeror's proposal. Agreement type, fixed price or expenditure based, will be subject to negotiation by the Agreements Officer; however, it is noted that the Government prefers use of fixed price milestones with a payment/funding schedule to the maximum extent possible. Do not include proprietary data. If the proposer requests award of an 845 OTA agreement as a nontraditional defense contractor, as so defined in the OSD guide entitled "Other Transactions (OT) Guide For Prototype Projects" dated January 2001 (as amended) (http://www.acq.osd.mil/dpap/Docs/otguide.doc), information must be included in the cost proposal to support the claim. Additionally, if the offeror requests award of an 845 OTA agreement, without the required one-third (1/3) cost share, information must be included in the cost proposal supporting that there is at least one non-traditional defense contractor participating to a significant extent in the proposed prototype project.

#### 7. Submission Dates and Times

The full proposal must be submitted per the instructions in Section IV.B.2 above by 2:00pm Eastern Time on December 17, 2010 in order to be considered during the initial evaluation phase.

Proposals may be submitted at any time from issuance of this announcement through 2:00pm Eastern Time on April 18, 2011; however, proposers are warned that the likelihood of funding is greatly reduced for proposals submitted after the initial closing date deadline.

DARPA will post a consolidated Question and Answer response on or after November 8, 2010, before final full proposals are due. In order to receive a response to your question, submit your question by November 3, 2010 to DARPA-BAA-11-19@darpa.mil.

DARPA will acknowledge receipt of complete submissions via e-mail and assign control numbers that should be used in all further correspondence regarding proposals.

Failure to comply with the submission procedures may result in the submission not being evaluated.

- 8. Intergovernmental Review: Not Applicable
- 9. Funding Restrictions: Not Applicable
- 10. Other Submission Requirements

Proposals MUST NOT be submitted to DARPA via email or fax (see Submission instructions above in Section IV.B).

# V. <u>APPLICATION REVIEW INFORMATION</u>

#### A. Evaluation Criteria

Evaluation of proposals will be accomplished through a scientific review of each proposal using the criteria listed below. The criteria are listed in descending order of relative importance. Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

# 1. Scientific, Technical, Engineering, and Mathematics (STEM) Educational Impact

The number and cross-section of students exposed to current, relevant, and appropriate science and engineering problems in the course of the offeror's proposed effort; the depth of each student's exposure; the incentives for learning and participation presented to each student. The overall likelihood of proposed activities to enhance learning and interest in science, technology, engineering, and mathematics.

#### 2. Overall Scientific and Technical Merit

The proposed technical approach is innovative, feasible, achievable, complete and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. The offeror's proposal will be evaluated on the long term effects of the proposed research including the impact on technology, whether there is

sufficient technical payoff to warrant any risk and the offeror's ability to meet program metrics. The expertise and experience of the offeror's proposed technical team will be evaluated based upon the qualifications of the key personnel proposed for the effort and their previous accomplishments on similar efforts.

#### 3. Potential Contribution and Relevance to the DARPA Mission

The potential contributions of the proposed effort with relevance to the national technology base will be evaluated. Specifically, DARPA's mission is to maintain the technological superiority of the U.S. military and prevent technological surprise from harming our national security by sponsoring revolutionary, high-payoff research that bridges the gap between fundamental discoveries and their application.

# 4. Intellectual Property

The extent to which intellectual property (IP) rights limitations placed on the proposer's technology and deliverables create a barrier to technology transition to the research, industrial, and operational military communities.

#### 5. Cost Realism

The objective of this criterion is to establish that the proposed costs are realistic for the technical and management approach offered, as well as to determine the proposer's practical understanding of the effort. The proposal will be reviewed to determine if the costs proposed are based on realistic assumptions, reflect a sufficient understanding of the technical goals and objectives of the BAA, and are consistent with the proposer's technical approach (to include the proposed Statement of Work). At a minimum, this will involve review, at the prime and subcontract level, of the type and number of labor hours proposed per task as well as the types and kinds of materials, equipment and fabrication costs proposed.

#### **B.** Review and Selection Process

Award(s) will be made to proposers whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort. DARPA's intent is to review proposals as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

It is the policy of DARPA to ensure impartial, equitable, comprehensive proposal evaluations and to select the source (or sources) whose offer meets the Government's technical, policy, and programmatic goals. Pursuant to FAR 35.016, the primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas.

Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. For evaluation purposes, a proposal is the document described in "Proposal Information," Section IV.B. Other supporting or background materials submitted with the proposal will be considered for the reviewer's convenience only and not considered as part of the proposal.

Restrictive notices notwithstanding, proposals may be handled for administrative purposes by support contractors. These support contractors are prohibited from competition in DARPA technical research and are bound by appropriate non-disclosure requirements.

Subject to the restrictions set forth in FAR 37.203(d), input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants/experts who are strictly bound by the appropriate non-disclosure requirements.

It is the policy of DARPA to treat all proposals as competitive information and to disclose their contents only for the purpose of evaluation. No proposals will be returned. After proposals have been evaluated and selections made, the original of each proposal received will be retained at DARPA and all other copies will be destroyed.

# VI. <u>AWARD ADMINISTRATION INFORMATION</u>

#### A. Award Notices

As soon as the evaluation of a proposal is complete, the proposer will be notified that 1) the proposal has been selected for funding pending contract negotiations, or 2) the proposal has not been selected. These official notifications will be sent via United States Postal Service or e-mail to the Technical point of contact identified on the proposal coversheet.

#### **B.** Administrative and National Policy Requirements

# 1. Meeting and Travel Requirements

There will be a program kickoff meeting and all key participants are required to attend. Performers should also anticipate at least bi-monthly PI meetings and periodic site visits at the Program Manager's discretion. The PI meetings will be held at Government-furnished facilities in major U.S. or international metropolitan areas with easy access by air. Performers should plan for short bi-weekly status updates to be conducted via videoteleconference (VTC) or traditional teleconference if appropriate facilities are unavailable.

#### 2. Human Use

All research involving human subjects, to include use of human biological specimens and human data, selected for funding must comply with the federal regulations for human subject protection. Further, research involving human subjects that is conducted or supported by the DoD must comply with 32 CFR 219, *Protection of Human Subjects* <a href="http://www.access.gpo.gov/nara/cfr/waisidx\_07/32cfr219\_07.html">http://www.access.gpo.gov/nara/cfr/waisidx\_07/32cfr219\_07.html</a>) and DoD Directive 3216.02, *Protection of Human Subjects and Adherence to Ethical Standards in DoD-Supported Research* (http://www.dtic.mil/whs/directives/corres/pdf/321602p.pdf).

Institutions awarded funding for research involving human subjects must provide documentation of a current Assurance of Compliance with Federal regulations for human subject protection, for example a Department of Health and Human Services, Office of Human Research Protection Federal Wide Assurance (<a href="http://www.hhs.gov/ohrp">http://www.hhs.gov/ohrp</a>). All institutions engaged in human subject research, to include subcontractors, must also have a valid Assurance. In addition, personnel involved in human subjects research must provide documentation of completing appropriate training for the protection of human subjects.

For all proposed research that will involve <u>human subjects in the first year or phase of the project</u>, the institution must provide evidence of or a plan for review by an Institutional Review Board (IRB) upon final proposal submission to DARPA. The IRB conducting the review must be the IRB identified on the institution's Assurance. The protocol, separate from the proposal, must include a detailed description of the research plan, study population, risks and benefits of study participation, recruitment and consent process, data collection, and data analysis. Consult the designated IRB for guidance on writing the protocol. The informed consent document must comply with federal regulations (32 CFR 219.116). A valid Assurance along with evidence of appropriate training all investigators should all accompany the protocol for review by the IRB.

In addition to a local IRB approval, a headquarters-level human subjects regulatory review and approval is required for all research conducted or supported by the DoD. The Army, Navy, or Air Force office responsible for managing the award can provide guidance and information about their component's headquarters-level review process. Note that confirmation of a current Assurance and appropriate human subjects protection training is required before headquarters-level approval can be issued.

The amount of time required to complete the IRB review/approval process may vary depending on the complexity of the research and/or the level of risk to study participants. Ample time should be allotted to complete the approval process. The IRB approval process can last between one to three months, followed by a DoD review that could last between three to six months. No DoD/DARPA funding can be used towards human subjects research until ALL approvals are granted.

#### 3. Animal Use

Any Recipient performing research, experimentation, or testing involving the use of animals shall comply with the rules on animal acquisition, transport, care, handling, and

use in: (i) 9 CFR parts 1-4, Department of Agriculture rules that implement the Laboratory Animal Welfare Act of 1966, as amended, (7 U.S.C. 2131-2159); (ii) the guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals"; (iii) DoD Directive 3216.01, "Use of Laboratory Animals in DoD Program."

For submissions containing animal use, proposals should briefly describe plans for Institutional Animal Care and Use Committee (IACUC) review and approval. Animal studies in the program will be expected to comply with the PHS Policy on Humane Care and Use of Laboratory Animals, available at <a href="http://grants.nih.gov/grants/olaw/olaw.htm">http://grants.nih.gov/grants/olaw/olaw.htm</a>.

All Recipients must receive approval by a DoD certified veterinarian, in addition to an IACUC approval. No animal studies may be conducted using DoD/DARPA funding until the USAMRMC Animal Care and Use Review Office (ACURO) or other appropriate DoD veterinary office(s) grant approval. As a part of this secondary review process, the Recipient will be required to complete and submit an ACURO Animal Use Appendix, which may be found at <a href="https://mrmc-proceedings.python.org/linearing-new-part-of-the-procedule-new-part-of-the-procedule-new-part-of-the-procedule-new-part-of-the-procedule-new-part-of-the-part-of-

www.army.mil/index.cfm?pageid=Research\_Protections.acuro&rn=1.

# 4. Publication Approval

It is the policy of the Department of Defense that the publication of products of fundamental research will remain unrestricted to the maximum extent possible. The definition of Contracted Fundamental Research is:

"Contracted Fundamental Research includes [research performed under] grants and contracts that are (a) funded by budget category 6.1 (Basic Research), whether performed by universities or industry or (b) funded by budget category 6.2 (Applied Research) and performed on-campus at a university. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant." Such research is referred to by DARPA as "Restricted Research."

Pursuant to DoD policy, research performed under grants and contracts that are (a) funded by budget category 6.2 (Applied Research) and NOT performed on-campus at a university or (b) funded by budget category 6.3 (Advanced Technology Development) does not meet the definition of fundamental research. Publication restrictions will be placed on all such research.

It is anticipated that awards for both Fundamental and Non-Fundamental Research may be made as a result of this BAA depending on the nature of the performer and place of performance. Appropriate clauses will be included in resultant awards for NonFundamental Research to prescribe publication requirements and other restrictions, as appropriate. DARPA does not anticipate applying publication restrictions of any kind to Fundamental Research to each individual award that may result from this BAA.

For certain research projects, it may be possible that although the research being performed by the Prime Contractor is Non-Fundamental Research, a subcontractor may be conducting Contracted Fundamental Research. In those cases, it is the Prime Contractor's responsibility to explain in their proposal why its subcontractor's effort is Contracted Fundamental Research.

The following same or similar provision will be incorporated into any resultant Restricted Research or Non-Fundamental Research procurement contract or other transaction:

There shall be no dissemination or publication, except within and between the Contractor and any subcontractors, of information developed under this contract or contained in the reports to be furnished pursuant to this contract without prior written approval of DARPA's Public Release Center (DARPA/PRC). All technical reports will be given proper review by appropriate authority to determine which Distribution Statement is to be applied prior to the initial distribution of these reports by the Contractor. With regard to subcontractor proposals for Contracted Fundamental Research, papers resulting from unclassified contracted fundamental research are exempt from prepublication controls and this review requirement, pursuant to DoD Instruction 5230.27 dated October 6, 1987.

When submitting material for written approval for open publication, the Contractor/Awardee must submit a request for public release to the PRC and include the following information: 1) Document Information: document title, document author, short plain-language description of technology discussed in the material (approx. 30 words), number of pages (or minutes of video) and document type (briefing, report, abstract, article, or paper); 2) Event Information: event type (conference, principle investigator meeting, article or paper), event date, desired date for DARPA's approval; 3) DARPA Sponsor: DARPA Program Manager, DARPA office, and contract number; and 4) Contractor/Awardee's Information: POC name, e-mail and phone. Allow four weeks for processing; due dates under four weeks require a justification. Unusual electronic file formats may require additional processing time. Requests can be sent either via e-mail to <a href="mailto:pro@darpa.mil">pro@darpa.mil</a> or via 3701 North Fairfax Drive, Arlington VA 22203-1714, telephone (571) 218-4235. Refer to <a href="mailto:www.darpa.mil/pro">www.darpa.mil/pro</a> for information about DARPA's public release process.

#### 5. Export Control

The following clause will be included in all procurement contracts, and may be included in Other Transactions as deemed appropriate:

- (a) *Definition*. "Export-controlled items," as used in this clause, means items subject to the Export Administration Regulations (EAR) (15 CFR Parts 730-774) or the International Traffic in Arms Regulations (ITAR) (22 CFR Parts 120-130). The term includes:
  - 1) "Defense items," defined in the Arms Export Control Act, 22 U.S.C. 2778(j)(4)(A), as defense articles, defense services, and related technical data, and further defined in the ITAR, 22 CFR Part 120.
  - 2) "Items," defined in the EAR as "commodities," "software," and "technology," terms that are also defined in the EAR, 15 CFR 772.1.
- (b) The Contractor shall comply with all applicable laws and regulations regarding export-controlled items, including, but not limited to, the requirement for contractors to register with the Department of State in accordance with the ITAR. The Contractor shall consult with the Department of State regarding any questions relating to compliance with the ITAR and shall consult with the Department of Commerce regarding any questions relating to compliance with the EAR.
- (c) The Contractor's responsibility to comply with all applicable laws and regulations regarding export-controlled items exists independent of, and is not established or limited by, the information provided by this clause.
- (d) Nothing in the terms of this contract adds, changes, supersedes, or waives any of the requirements of applicable Federal laws, Executive orders, and regulations, including but not limited to—
- (1) The Export Administration Act of 1979, as amended (50 U.S.C. App. 2401, et seq.);
- (2) The Arms Export Control Act (22 U.S.C. 2751, et seq.);
- (3) The International Emergency Economic Powers Act (50 U.S.C. 1701, et seq.);
- (4) The Export Administration Regulations (15 CFR Parts 730-774);
- (5) The International Traffic in Arms Regulations (22 CFR Parts 120-130); and
- (6) Executive Order 13222, as extended;
- (e) The Contractor shall include the substance of this clause, including this paragraph (e), in all subcontracts.

#### 6. Subcontracting

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy. Each proposer who submits a contract proposal and includes subcontractors is required to submit a subcontracting plan in accordance with FAR 19.702(a) (1) and (2) should do so with their proposal. The plan format is outlined in FAR 19.704.

# 7. Electronic and Information Technology

All electronic and information technology acquired through this solicitation must satisfy the accessibility requirements of Section 508 of the Rehabilitation Act (29 U.S.C. 794d) and FAR Subpart 39.2. Each proposer who submits a proposal involving the creation or inclusion of electronic and information technology must ensure that Federal employees with disabilities will have access to and use of information that is comparable to the access and use by Federal employees who are not individuals with disabilities and members of the public with disabilities seeking information or services from DARPA will have access to and use of information and data that is comparable to the access and use of information and data by members of the public who are not individuals with disabilities.

# 8. Employment Eligibility Verification

As per FAR 22.1802, recipients of FAR-based procurement contracts must enroll as Federal Contractors in E-verify and use E-Verify to verify employment eligibility of all employees assigned to the award. All resultant contracts from this solicitation will include FAR 52.222-54, "Employment Eligibility Verification." This clause will not be included in grants, cooperative agreements, or Other Transactions.

# **9.** Central Contractor Registration (CCR) and Universal Identifier Requirements

Unless the proposer is exempt from this requirement, as per FAR 4.1403-a or DoDGARs Part25.110, as applicable, all proposers must be registered in the Central Contractor Registration (CCR) and have a valid Data Universal Numbering System (DUNS) number prior to submitting a proposal. Information on CCR registration is available at <a href="http://www.ccr.gov">http://www.ccr.gov</a>. All proposers must maintain an active CCR registration with current information at all times during which they have an active Federal award or proposal under consideration by DARPA. All proposers must provide the DUNS number in each proposal they submit.

DARPA cannot make an award to a proposer until the proposer has provided a valid DUNS number and has maintained an active CCR registration with current information.

# 10. Reporting Executive Compensation and First-Tier Subcontract Awards

The following clause will be used in all procurement contracts regarding the reporting of executive compensation and first-tier subawards. A similar award term will be used in all grants and cooperative agreements.

# **Reporting Executive Compensation and First-Tier Subcontract Awards (Jul 2010)**

(a) Definitions. As used in this clause:

"Executive" means officers, managing partners, or any other employees in management positions.

"First-tier subcontract" means a subcontract awarded directly by a Contractor to furnish supplies or services (including construction) for performance of a prime contract, but excludes supplier agreements with vendors, such as long-term arrangements for materials or supplies that would normally be applied to a Contractor's general and administrative expenses or indirect cost.

"Total compensation" means the cash and noncash dollar value earned by the executive during the Contractor's preceding fiscal year and includes the following (for more information see 17 CFR 229.402(c)(2)):

- (1) Salary and bonus.
- (2) Awards of stock, stock options, and stock appreciation rights. Use the dollar amount recognized for financial statement reporting purposes with respect to the fiscal year in accordance with the Statement of Financial Accounting Standards No. 123 (Revised 2004) (FAS 123R), Shared Based Payments.
- (3) Earnings for services under non-equity incentive plans. This does not include group life, health, hospitalization or medical reimbursement plans that do not discriminate in favor of executives, and are available generally to all salaried employees.
- (4) Change in pension value. This is the change in present value of defined benefit and actuarial pension plans.
- (5) Above-market earnings on deferred compensation which is not tax-qualified.
- (6) Other compensation, if the aggregate value of all such other compensation (e.g., severance, termination payments, value of life

insurance paid on behalf of the employee, perquisites or property) for the executive exceeds \$10,000.

- (b) Section 2(d) of the Federal Funding Accountability and Transparency Act of 2006 (Pub. L. No. 109-282), as amended by section 6202 of the Government Funding Transparency Act of 2008 (Pub. L. 110-252), requires the Contractor to report information on subcontract awards. The law requires all reported information be made public; therefore, the Contractor is responsible for notifying its subcontractors that the required information will be made public.
- (c)(1) Unless otherwise directed by the contracting officer, by the end of the month following the month of award of a first-tier subcontract with a value of \$25,000 or more, (and any modifications to these subcontracts that change previously reported data), the Contractor shall report the following information at <a href="http://www.fsrs.gov">http://www.fsrs.gov</a> for each first-tier subcontract. (The Contractor shall follow the instruction s at <a href="http://www.fsrs.gov">http://www.fsrs.gov</a> to report the data.)
  - (i) Unique identifier (DUNS Number) for the subcontractor receiving the award and for the subcontractor's parent company, if the subcontractor has a parent company.
  - (ii) Name of the subcontractor.
  - (iii) Amount of the subcontract award.
  - (iv) Date of the subcontract award.
  - (v) A description of the products or services (including construction) being provided under the subcontract, including the overall purpose and expected outcomes or results of the subcontract.
  - (vi) Subcontract number (the subcontract number assigned by the Contractor).
  - (vii) Subcontractor's physical address including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
  - (viii) Subcontractor's primary performance location including street address, city, state, and country. Also include the nine-digit zip code and congressional district.
  - (ix) The prime contract number, and order number if applicable.
  - (x) Awarding agency name and code.

- (xi) Funding agency name and code.
- (xii) Government contracting office code.
- (xiii) Treasury account symbol (TAS) as reported in FPDS.
- (xiv) The applicable North American Industry Classification System code (NAICS).
- (2) By the end of the month following the month of a contract award, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for the Contractor's preceding completed fiscal year at <a href="http://www.ccr.gov">http://www.ccr.gov</a>, if—
  - (i) In the Contractor's preceding fiscal year, the Contractor received—
    - (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
    - (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
  - (ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <a href="http://www.sec.gov/answers/execomp.htm">http://www.sec.gov/answers/execomp.htm</a>.)
- (3) Unless otherwise directed by the contracting officer, by the end of the month following the month of a first-tier subcontract with a value of \$25,000 or more, and annually thereafter, the Contractor shall report the names and total compensation of each of the five most highly compensated executives for each first-tier subcontractor for the subcontractor's preceding completed fiscal year at <a href="http://www.fsrs.gov">http://www.fsrs.gov</a>, if—
  - (i) In the subcontractor's preceding fiscal year, the subcontractor received—

- (A) 80 percent or more of its annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
- (B) \$25,000,000 or more in annual gross revenues from Federal contracts (and subcontracts), loans, grants (and subgrants) and cooperative agreements; and
- (ii) The public does not have access to information about the compensation of the executives through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986. (To determine if the public has access to the compensation information, see the U.S. Security and Exchange Commission total compensation filings at <a href="http://www.sec.gov/answers/execomp.htm">http://www.sec.gov/answers/execomp.htm</a>.)
- (d)(1) If the Contractor in the previous tax year had gross income, from all sources, under \$300,000, the Contractor is exempt from the requirement to report subcontractor awards.
  - (2) If a subcontractor in the previous tax year had gross income from all sources under \$300,000, the Contractor does not need to report awards to that subcontractor.
- (e) Phase-in of reporting of subcontracts of \$25,000 or more.
  - (1) Until September 30, 2010, any newly awarded subcontract must be reported if the prime contract award amount was \$20,000,000 or more.
  - (2) From October 1, 2010, until February 28, 2011, any newly awarded subcontract must be reported if the prime contract award amount was \$550,000 or more.
  - (3) Starting March 1, 2011, any newly awarded subcontract must be reported if the prime contract award amount was \$25,000 or more.

# C. Reporting

The number and types of reports will be specified in the award document, but will include as a minimum monthly financial and technical status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be

continued under a follow-on vehicle. At least one copy of each report will be delivered to DARPA and not merely placed on an Internet site.

# **D.** Electronic Systems

# 1. Representations and Certifications

In accordance with FAR 4.1201, prospective proposers shall complete electronic annual representations and certifications at http://orca.bpn.gov.

# 2. Wide Area Work Flow (WAWF)

Unless using another approved electronic invoicing system, performers will be required to submit invoices for payment directly via the Internet/WAWF at <a href="http://wawf.eb.mil">http://wawf.eb.mil</a>. Registration to WAWF will be required prior to any award under this BAA.

#### 3. i-Edison

All required invention and patent reporting shall be accomplished, as applicable, using the i-Edison.gov reporting website at (<a href="http://s-edison.info.nih.gov/iEdison">http://s-edison.info.nih.gov/iEdison</a>).

# VII. AGENCY CONTACTS

Administrative, technical or contractual questions should be sent via e-mail to DARPA-11-19@darpa.mil. All requests must include the name, email address, and phone number of a point of contact.

# VIII. OTHER INFORMATION

#### A. . Intellectual Property

#### 1. Procurement Contract Proposers

# a. Noncommercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting a procurement contract to be issued under the FAR/DFARS shall identify all noncommercial technical data and noncommercial computer software that it plans to generate, develop, and/or deliver under any proposed award instrument in which the Government will acquire less than unlimited rights, and to assert specific restrictions on those deliverables. Proposers shall follow the format under DFARS 252.227-7017 for this stated purpose. In the event that proposers do not submit the list, the Government will assume that it automatically has "unlimited rights" to all noncommercial technical data and noncommercial computer software generated,

developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and noncommercial computer software occurred with mixed funding. If mixed funding is anticipated in the development of noncommercial technical data and noncommercial computer software generated, developed, and/or delivered under any award instrument, then proposers should identify the data and software in question, as subject to Government Purpose Rights (GPR). In accordance with DFARS 252.227-7013 Rights in Technical Data - Noncommercial Items, and DFARS 252.227-7014 Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation, the Government will automatically assume that any such GPR restriction is limited to a period of five (5) years in accordance with the applicable DFARS clauses, at which time the Government will acquire "unlimited rights" unless the parties agree otherwise. Proposers are admonished that the Government will use the list during the evaluation process to evaluate the impact of any identified restrictions and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state "NONE." It is noted an assertion of "NONE" indicates that the Government has "unlimited rights" to all noncommercial technical data and noncommercial computer software delivered under the award instrument, in accordance with the DFARS provisions cited above. Failure to provide full information may result in a determination that the proposal is not compliant with the BAA – resulting in nonselectability of the proposal.

A sample list for complying with this request is as follows:

#### **NONCOMMERCIAL**

Technical Data	Summary of	Basis for Assertion	Asserted Rights	Name of Person Asserting
Computer Software To	Intended Use in the		Category	Restrictions
be Furnished With	Conduct of the			
Restrictions	Research			
(LIST)	(NARRATIVE)	(LIST)	(LIST)	(LIST)

# **b.** Commercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting a procurement contract to be issued under the FAR/DFARS shall identify all commercial technical data and commercial computer software that may be embedded in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government's use of such commercial technical data and/or commercial computer software. In the event that proposers do not submit the list, the Government will assume that there are no restrictions on the Government's use of such commercial items. The Government may use the list during the evaluation process to evaluate the impact of any identified restrictions and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state

"NONE." Failure to provide full information may result in a determination that the proposal is not compliant with the BAA – resulting in nonselectability of the proposal.

A sample list for complying with this request is as follows:

COMMERCIAL				
Technical Data	Basis for Assertion	Asserted Rights	Name of Person Asserting	
Computer Software To		Category	Restrictions	
be Furnished With				
Restrictions				
(LIST)	(LIST)	(LIST)	(LIST)	

# **B.** Non-Procurement Contract Proposers – Noncommercial and Commercial Items (Technical Data and Computer Software)

Proposers responding to this BAA requesting an Other Transaction for Prototype shall follow the applicable rules and regulations governing these various award instruments, but in all cases should appropriately identify any potential restrictions on the Government's use of any Intellectual Property contemplated under those award instruments in question. This includes both Noncommercial Items and Commercial Items. Although not required, proposers may use a format similar to that described in Paragraphs 1.a and 1.b above. The Government may use the list during the evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the proposer, as may be necessary, to evaluate the proposer's assertions. If no restrictions are intended, then the proposer should state "NONE." Failure to provide full information may result in a determination that the proposal is not compliant with the BAA – resulting in nonselectability of the proposal.

#### C. All Proposers – Patents

Include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for the DARPA program. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: 1) a representation that you own the invention, or 2) proof of possession of appropriate licensing rights in the invention.

# 1. All Proposers – Intellectual Property Representations

Provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal for the DARPA program. Additionally, proposers shall provide a short summary for each item

asserted with less than unlimited rights that describes the nature of the restriction and the intended use of the intellectual property in the conduct of the proposed research.